



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/696,675	10/25/2000	Eric J. Geiger	T99,005-B	4590
20306	7590	11/10/2003	EXAMINER	
MCDONNELL BOEHNEN HULBERT & BERGHOFF			SERGENT, RABON A	
300 SOUTH WACKER DRIVE			ART UNIT	
SUITE 3200			PAPER NUMBER	
CHICAGO, IL 60606			1711	

DATE MAILED: 11/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/696,675

Applicant(s)

GEIGER ET AL.

Examiner

Rabon Sergeant

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 34 and 36-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 34 and 36-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 1711

1. Claims 34 and 36-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is improper to define the number range of the integer,  $n_2$ , using "about". It is unclear how to interpret such integer values, because it is unclear with respect to what values are encompassed by "about 1".

2. Claims 34 and 36-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants have claimed that a) and b) are combined to form an intermediate polyester polyol; however, it is unclear that simply combining the components will yield a polyester polyol. If a product is to result, then the components should be specified as reacting.

Additionally, it is confusing to use the same descriptors {i.e.; a) and b)} for two different entities. See, for example, component a) phthalic anhydride or acid and a) alkylene groups within the definition of  $R_1$ .

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1711

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 34 and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mayer et al. ('580) in view of Allen et al. ('601).

Mayer et al. disclose the ethoxylation of a polyester initiator derived from a glycol and phthalic anhydride; however, patentees are silent regarding the use of propylene oxide as the alkoxylation agent. Under the provisions of MPEP 2144.03, the position is taken that the use of propylene oxide as a terminating alkoxylation agent was known at the time of invention as a means for terminating reactants or polyols with less reactive or secondary hydroxyl groups. Furthermore, the use of double metal cyanide catalysts to produce polyoxypropylene polyols was known at the time of invention to be preferable over methods which utilize more conventional catalysts, such as KOH, because the double metal cyanide catalyzed polyoxypropylene polyols display increased functionality and decreased levels of unsaturation, by comparison. This position is supported by the teachings of Allen et al.

Art Unit: 1711


5. Therefore, it would have been obvious to one of ordinary skill to substitute propylene oxide for ethylene oxide within the method of Mayer et al. and further, to use double metal cyanide catalysts to catalyze the alkoxylation step, so as to obtain polyoxypropylene terminated polyester-ethers having the improved properties associated with the use of double metal cyanide catalysts.

6. The examiner has considered applicants' arguments; however, the position is maintained that it would have been obvious to utilize virtually any active hydrogen containing component, known to be useful as an initiator component, including the claimed polyester polyol, with the double metal cyanide catalyst of the prior art. Applicants have provided no rationale as to why one of ordinary skill would not have expected the polyester polyols of the primary reference to function as initiators when used with the double metal cyanide catalysts of the secondary reference.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

R. Sergent

November 3, 2003

  
RABON SERGENT  
PRIMARY EXAMINER